

### R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

### I N T H E D R A W I N G S

A new drawing, FIG. 3, is submitted herewith. Support for the new FIG. 3 can be found in the drawings as originally filed, for example, on FIGS. 1 and 2a and in the specification as originally filed, for example, on page 7, lines 11-21, on page 9, line 4 through page 10, line 1, on page 10, line 17 through page 11, line 8, on page 12, lines 14-21, on page 14, lines 14-17, and on page 18, line 12 through page 19, line 2. As such, no new matter has been introduced.

### I N T H E S P E C I F I C A T I O N

The specification has been amended for consistency with the addition of FIG. 3.

### S U P P O R T F O R C L A I M A M E N D M E N T S

Support for the amendments to the claims can be found in the drawings as originally filed, for example, on FIGS. 1, 2a and 2b and in the specification as originally filed, for example, on page on page 7, lines 11-21, on page 9, line 4 through page 10, line 1, on page 10, line 17 through page 11, line 8, on page 12, lines 14-21, on page 14, lines 14-17, and on page 18, line 12

through page 19, line 2. As such, no new matter has been introduced.

**CLAIM REJECTIONS UNDER 35 U.S.C. §103**

The rejection of claims 1-10, 12-17 and 20 under 35 U.S.C. §103 as being unpatentable over Foster et al. (U.S. Patent No. 5,665,640; hereinafter Foster) in view of Ishikawa et al. (U.S. Patent No. 6,143,078; hereinafter Ishikawa) has been obviated by appropriate amendment and should be withdrawn.

The rejection of claims 11, 18 and 19 under 35 U.S.C. §103 as being unpatentable over Foster and Ishikawa in view of Curtis (U.S. Patent No. 4,328,068) is respectfully traversed and should be withdrawn.

In contrast to the cited references, the presently claimed invention (claim 1) provides a channel sleeve for a plasma processing chamber comprising a one-piece outer portion configured for insertion into an aperture through a wall of the plasma processing chamber, the one-piece outer portion consisting of an electrically insulative material and having dimensions effective to prevent or inhibit plasma arcing to an electrically conductive surface of the wall of the plasma processing chamber exposed by the aperture through the wall of the plasma processing chamber, the one-piece outer portion further comprising: (i) a flange section having a dimension greater than a corresponding dimension of the

aperture, such that the flange section contacts a portion of an outside surface of the wall surrounding the aperture when the channel sleeve is inserted in the aperture through the wall of the plasma processing chamber, (ii) a lower section having a shape and dimensions approximately the same as a corresponding shape and dimensions of the aperture, wherein the lower section is configured to fit securely into the aperture, and (iii) an inner opening communicating through the electrically insulative material between a bottom and a top of the outer portion, wherein the inner opening transfers a spectroscopic endpoint detection signal. Claims 2-6, 8 and 9 include similar limitations. Foster, Ishikawa and Curtis do not teach or suggest a channel sleeve, as presently claimed. As such, the presently claimed invention is fully patentable over the cited references and the rejection should be withdrawn.

Specifically, the Office Action admits that Foster and Ishikawa do not teach a physical signal consisting of a spectroscopic endpoint detection signal or a channel therefor (see page 10, lines 11-13 of the Office Action. Since Foster and Ishikawa do not teach a physical signal consisting of a spectroscopic endpoint detection signal or a channel therefor, it follows that Foster and Ishikawa do not teach or suggest a channel sleeve comprising a one-piece outer portion having an inner opening communicating through the electrically insulative material between a bottom and a top of the outer portion, wherein the inner opening

transfers a spectroscopic endpoint detection signal, as presently claimed. Therefore, Foster and Ishikawa do not teach or suggest each and every element of the presently claimed invention.

Curtis does not cure the deficiencies of Foster and Ishikawa. Specifically, Curtis does not teach or suggest a channel sleeve comprising a one-piece outer portion having an inner opening communicating through the electrically insulative material between a bottom and a top of the outer portion, wherein the inner opening transfers a spectroscopic endpoint detection signal, as presently claimed. In particular, Curtis is silent regarding a channel, a sleeve or a channel sleeve. Instead, Curtis describes using a "light pipe" inserted through the chamber wall for coupling light emitted by different chemical species out of the chamber (see abstract of Curtis). Since Curtis is silent regarding a channel and a sleeve, it follows that Curtis does not teach or suggest a channel sleeve as presently claimed. Therefore, Foster, Ishikawa and Curtis do not teach or suggest each and every element of the presently claimed invention. As such, the presently claimed invention is fully patentable over the cited references and the rejection should be withdrawn.

Furthermore, the motivation for the modification of Foster and Ishikawa urged by the Office Action (see page 10, lines 16-21 of the Office Action) does not appear to be proper under MPEP §2143.01. Specifically, a proposed modification cannot render the

prior art unsatisfactory for its intended purpose or change the principle of operation of the reference (see MPEP §2143.01(V) and (VI)). In particular, the replacement of the RF energy electrode of Foster and Ishikawa with the light pipe of Curtis would render the apparatus of Foster and Ishikawa unsuitable for its intended purpose or at the very least, clearly change the principle of operation. Because the urged modification of Foster and Ishikawa with Curtis would render the apparatus of Foster and Ishikawa unsatisfactory for its intended purpose or change the principle of operation, there is no suggestion or motivation to make the proposed modification (see MPEP §2143.01(V) and (VI)). Therefore, the Office Action does not meet the Office's burden to factually establish a *prima facie* case for a conclusion of obviousness. As such, the rejection of the claims as being unpatentable over Foster and Ishikawa in view of Curtis does not appear to be sustainable and should be withdrawn.

Claims 7 and 10-20 depend, directly or indirectly, from either claim 1, claim 6 or claim 9 which are believed to be allowable. As such, the presently claimed invention is fully patentable over the cited references and the rejection should be withdrawn.

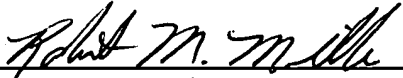
Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicants' representative should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge our office Account No. 50-0541.

Respectfully submitted,

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